

CLAIMS:

1. Correlation system (4) for correlating an input signal with a number of code signals each having a code length, characterized in that said correlation system (4) comprises a controller (3) for controlling said correlation system (4) for performing iterative correlations and for adapting at least one correlation parameter per iterative correlation.

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2. Correlation system (4) according to claim 1, characterized in that a first correlation parameter corresponds with the length of code signals, with first correlations using code signals each having a first length smaller than said code length, and with next correlations using code signals each having a second length larger than said first length and smaller than or equal to said code length.

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3. Correlation system (4) according to claim 2, characterized in that a second correlation parameter corresponds with the number of code signals, with first correlations using a first number of code signals, and with next correlations using a second number of code signals smaller than said first number of code signals.

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4. Correlation system (4) according to claim 3, characterized in that said controller (3) is coupled to a comparator (5) for comparing correlation results for in dependence of comparison results adapting said at least one correlation parameter.

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5. Correlation system (4) according to claim 4, characterized in that said controller (3) is coupled to a selector (5) for in response to comparison results selecting a reduced number of code signals to be used for next correlations.

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6. Mobile terminal (1) for searching cells identified by code signals, which mobile terminal (1) comprises a receiver (2) for receiving a radio signal comprising at least one code signal and for converting said radio signal into an input signal and comprises a correlation system (4) coupled to said receiver (2) for correlating said input signal with a number of said code signals each having a code length, characterized in that said correlation

system (4) comprises a controller (3) for controlling said correlation system (4) for performing iterative correlations and for adapting at least one correlation parameter per iterative correlation.

5 7. Mobile terminal (1) according to claim 6, characterized in that a first correlation parameter corresponds with the length of code signals, with first correlations using code signals each having a first length smaller than said code length, and with next correlations using code signals each having a second length larger than said first length and smaller than or equal to said code length.

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8. Mobile terminal (1) according to claim 7, characterized in that a second correlation parameter corresponds with the number of code signals, with first correlations using a first number of code signals, and with next correlations using a second number of code signals smaller than said first number of code signals.

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9. Mobile terminal (1) according to claim 8, characterized in that said controller (3) is coupled to a comparator (5) for comparing correlation results for in dependence of comparison results adapting said at least one correlation parameter until at least one cell has been found through identification of at least one code signal.

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10. Mobile terminal (1) according to claim 9, characterized in that said controller (3) is coupled to a selector (5) for in response to comparison results selecting a reduced number of code signals to be used for next correlations until at least one cell has been found through identification of at least one code signal.

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11. Method for correlating an input signal with a number of code signals each having a code length, characterized in that said method comprises the steps of performing iterative correlations and of adapting at least one correlation parameter per iterative correlation.

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12. Processor program product for correlating an input signal with a number of code signals each having a code length, characterized in that said processor program product comprises the functions of performing iterative correlations and of adapting at least one correlation parameter per iterative correlation.

13. Method for searching cells identified by code signals, which method comprises the steps of receiving a radio signal comprising at least one code signal and of converting said radio signal into an input signal and of correlating said input signal with a
- 5 number of said code signals each having a code length, characterized in that said method comprises the steps of performing iterative correlations and of adapting at least one correlation parameter per iterative correlation.